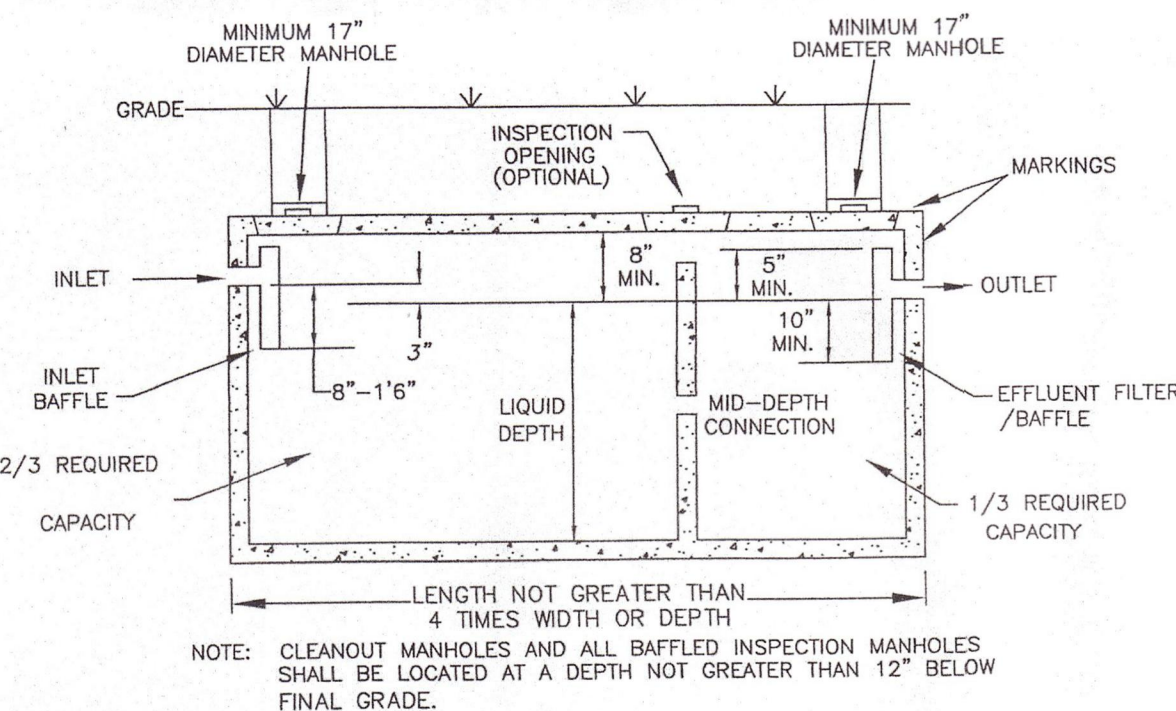
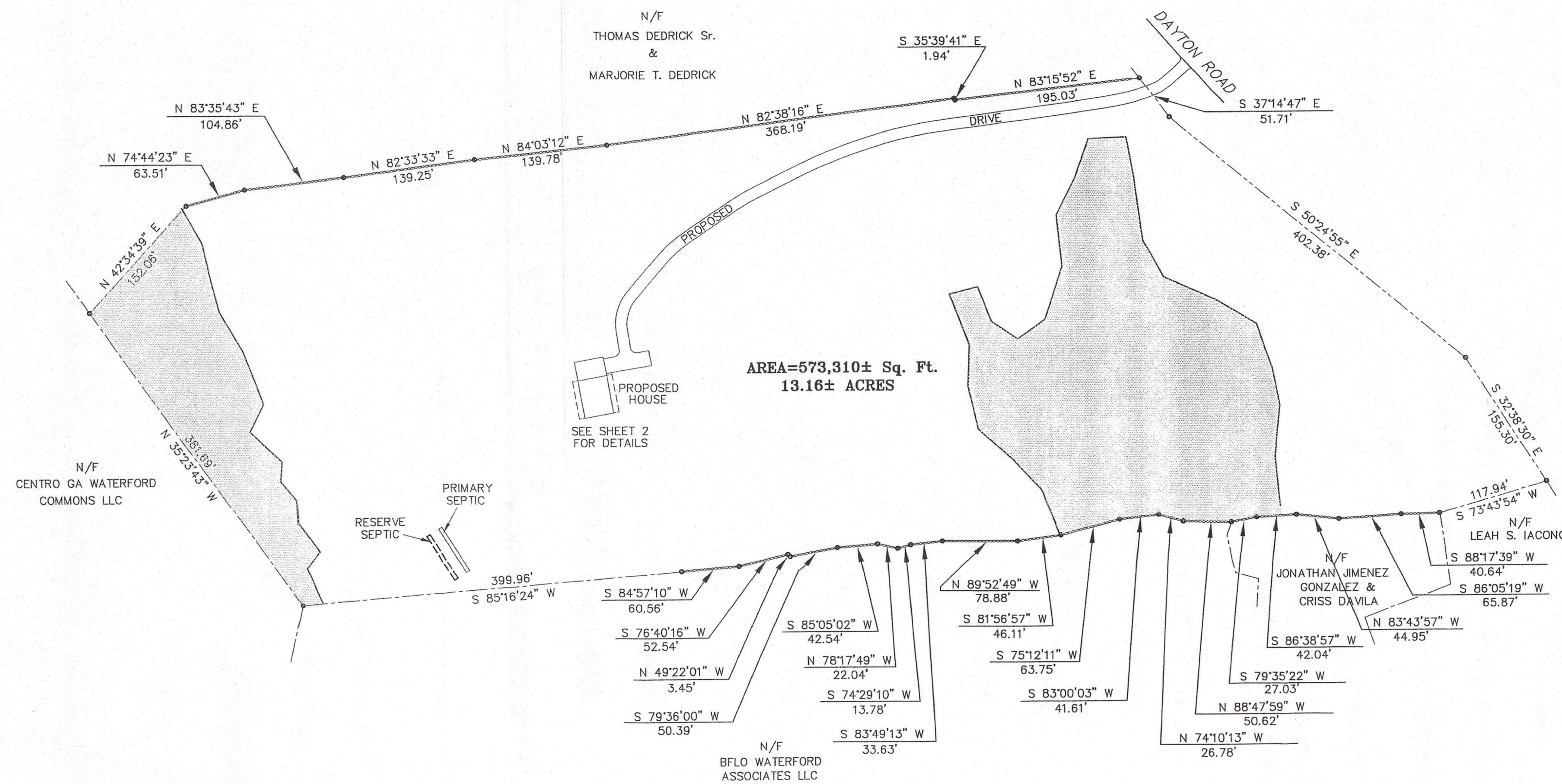
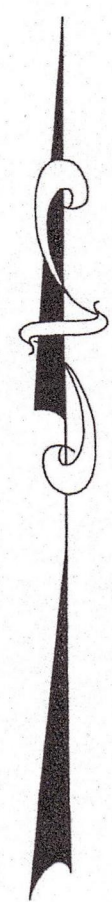
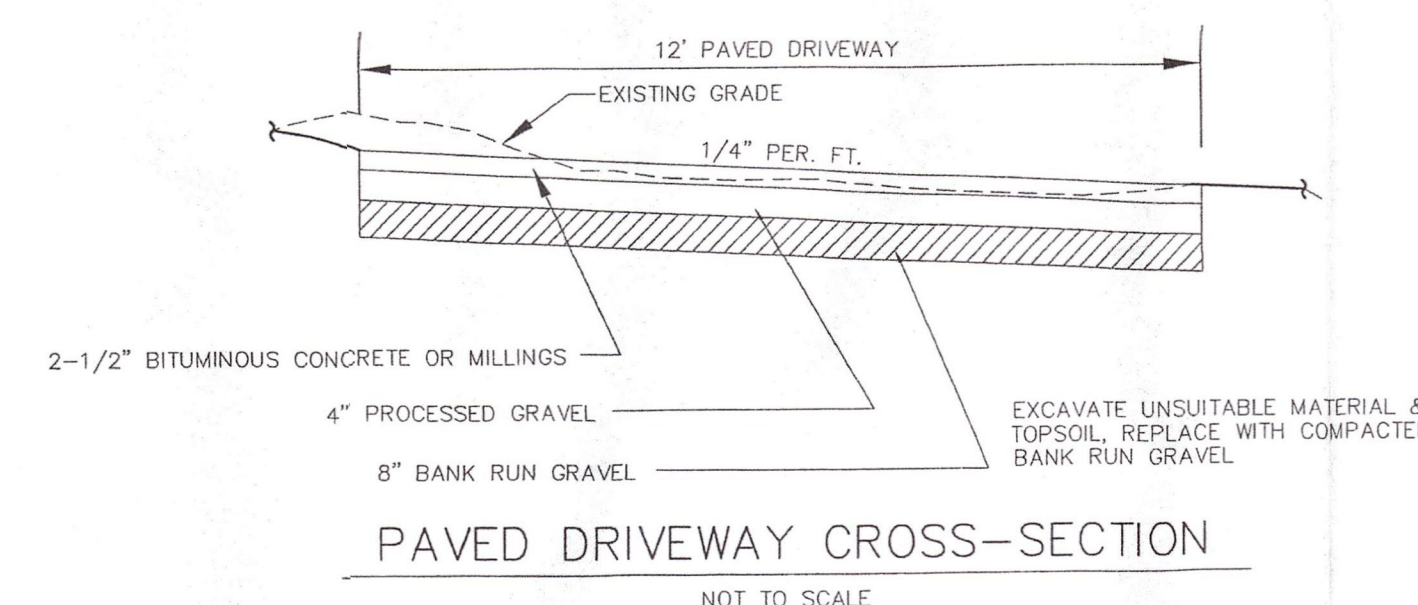
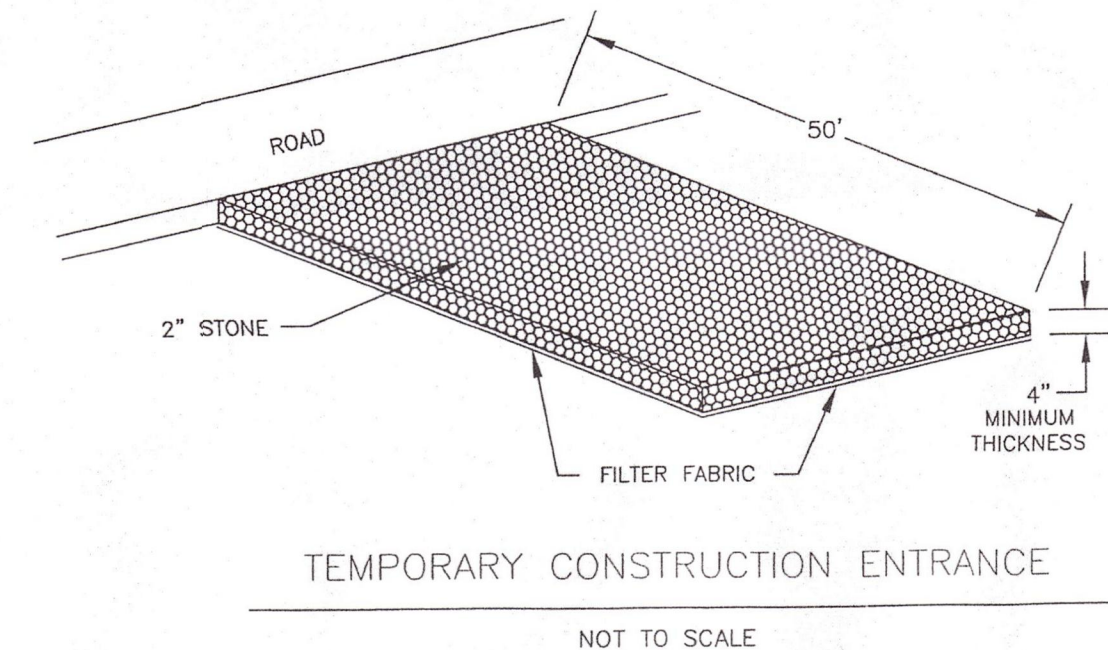
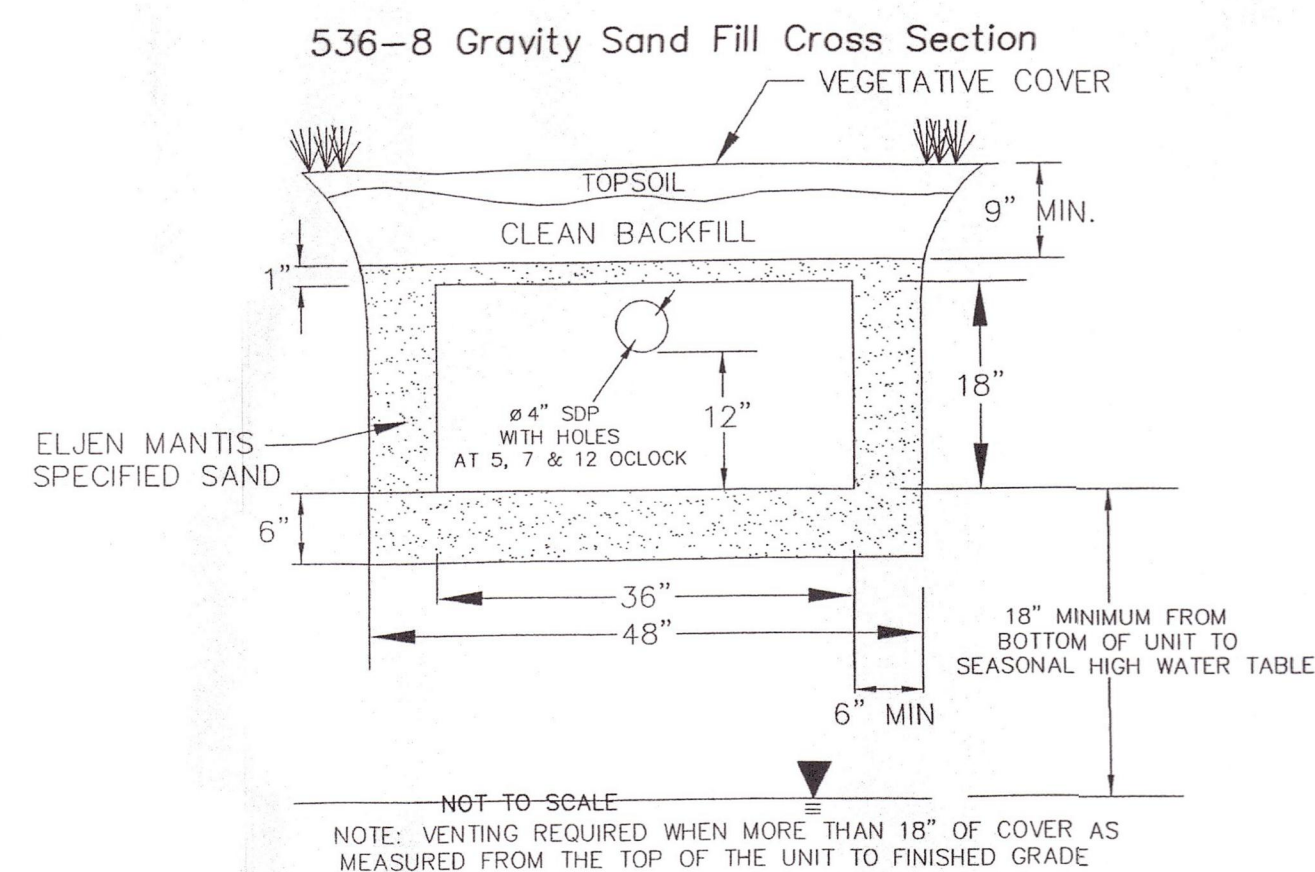
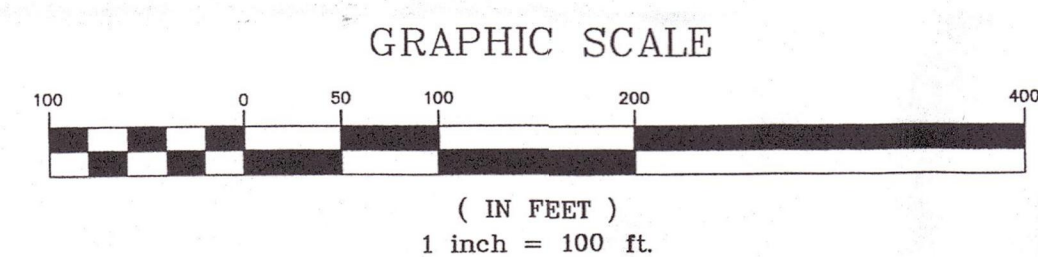




TYPICAL SEPTIC TANK
NOT TO SCALE



- LEGEND
- PROPERTY LINE
 - STREET LINE
 - INLAND WETLANDS AS SHOWN ON MAP REFERENCE 1

1. SET POSTS & EXCAVATE A 6" x 6" TRENCH. SET POSTS DOWNSLOPE. ANGLE UPSLOPE FOR STABILITY & SELF-CLEANING.
2. STAPLE THE WIRE MESH FENCING TO END POST.
3. ATTACH FILTER FABRIC TO THE WIRE FENCING & EXTEND IT INTO THE TRENCH.
4. BACKFILL THE TRENCH & COMPACT WITH EXCAVATED SOIL.

FILTER FABRIC SEDIMENT BARRIER
NOT TO SCALE

- GENERAL NOTES
1. MAP REFERENCE:
PROPERTY SURVEY AND EXISTING CONDITIONS PLAN PROPERTY OF CONSTANCE A. COOK ET ALS DAYTON ROAD WATERFORD, CONNECTICUT DATE: JUNE 14, 2005 SCALE: 1"=60' DICESARE-BENTLEY ENGINEERS/SURVEYORS/PLANNERS. SHEET 1 OF 1.
 2. THIS LOT WAS TOPOED IN THE AREA OF THE HOUSE AND SEPTIC SYSTEM AND BENCH MARK SET BY DIETER & GARDNER, INC. LAND SURVEYORS IN AUGUST 2023. INLAND WETLANDS AS SHOWN ON SUBDIVISION PLAN.
 3. AT THE TIME OF THIS DESIGN THERE WERE NO EXISTING WELLS WITHIN 75' OF THE PROPOSED SEPTIC SYSTEM AND THERE WERE NO EXISTING SEPTIC SYSTEMS WITHIN 75' OF THE PROPOSED WELL LOCATION.
 4. TOPSOIL OR ORGANIC MATERIAL BELOW THE TOP OF THE LEACHING SYSTEM SHALL BE REPLACED WITH SELECT FILL. "SELECT FILL MATERIAL", PLACED WITHIN AND ADJACENT TO PROPOSED LEACHING AREAS SHALL BE COMPRISED OF CLEAN SAND AND GRAVEL, FREE FROM ORGANIC MATERIAL AND DELETERIOUS SUBSTANCES. THE FILL MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE APPROVED BY A PROFESSIONAL ENGINEER FOR USE WITHIN THE LEACHING AREA:

SIEVE SIZE	WET SIEVE	DRY SIEVE
#4	100%	100%
#10	70%-100%	70%-100%
#40	10%-50%	10%-75%
#100	0%-20%	0%-5%
#200	0%-5%	0%-2.5%

*PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.

THE LICENSED INSTALLER IS RESPONSIBLE FOR PREPARING THE LEACHING AREA WITH NECESSARY SELECT FILL. THE TOPSOIL IN THE LEACHING SYSTEM AREA MUST BE REMOVED AND THE SUBSOIL SCARIFIED PRIOR TO SELECT FILL PLACEMENT UNLESS OTHERWISE DIRECTED BY THE DESIGN ENGINEER. THE INSTALLER SHALL TAKE NECESSARY STEPS TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOIL FROM OVER COMPACTION OR DAMAGE. SELECT FILL SHALL EXTEND A MINIMUM OF FIVE (5) FEET LATERALLY IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE LEACHING SYSTEM. THE COMMISSIONER OF PUBLIC HEALTH MUST APPROVE MANUFACTURED FILL. ROCK USED TO PRODUCE MANUFACTURED FILL MUST HAVE A LOSS OF ABRASION OF NOT MORE THAN 50% USING AASHTO METHOD T-96. SUPPLIERS OF MANUFACTURED FILL MUST MAKE APPLICATION FOR APPROVAL TO THE COMMISSIONER OF PUBLIC HEALTH. DOCUMENTATION MUST BE SUBMITTED ON THE QUARRY OPERATION, AND PRODUCTION PROCESS. FILL SPECIFICATIONS (GRADUATION, PERMEABILITY, ETC.) AND A NARRATIVE OF THE QUALITY CONTROL/QUALITY ASSURANCE PROGRAM MUST ALSO BE INCLUDED. THE MANUFACTURED FILL PRODUCERS MUST PROVIDE ANNUAL PRODUCT REGISTRATIONS TO THE COMMISSIONER OF PUBLIC HEALTH.

5. FOUNDATION DRAINAGE AND THE FOUNDATION OUTLET DRAIN SHALL BE LOCATED A MINIMUM DISTANCE OF 25' FROM THE SEPTIC SYSTEM. A RODENT PROOF COVER SHALL BE PROVIDED AT THE FOUNDATION OUTLET DRAIN AT "DAYLIGHT".
6. PRIOR TO FOUNDATION INSTALLATION AND SUBSEQUENT TO LOT CLEARING, THE FOUNDATION AND SEPTIC SYSTEM SHALL BE STAKED OUT AND GRADES ESTABLISHED BY A LICENSED LAND SURVEYOR.
7. APPLICANT: BEN TOPKIN
860-326-4650
BTOPKIN@AOL.COM
8. ENGINEER: JOHN MARTUCCI
C/O DIETER & GARDNER, INC.
1641 ROUTE 12
GALES FERRY, CT 06335
(860) 464-7455

ZONING COMPLIANCE TABLE R-40 ZONE		
ITEM	REQUIRED	PROVIDED
FRONT YARD	50'	647.5'
SIDE YARD	20'	171.1'
REAR YARD	50'	353.6'
MINIMUM LOT FRONTAGE	100'	609.4'
MINIMUM LOT AREA (Sq. Ft.)	40,000 Sq. Ft.	573,310± Sq. Ft.
MAXIMUM HEIGHT (EFF. 8/01/02)	35'	LESS THAN 30'
MAXIMUM BUILDING COVERAGE	25%	0.27%/1,600 Sq. Ft.

SHEET INDEX

SHEET 1) 100 SCALE MAP, GENERAL NOTES & SITE DETAILS
SHEET 2) 30 SCALE SITE PLAN

PLAN SHOWING
PROPOSED HOUSE, DRIVE,
UTILITY CONNECTIONS
AND SEPTIC SYSTEM
PREPARED FOR
BEN TOPKIN
76 DAYTON ROAD
WATERFORD, CONNECTICUT
SCALE: 1"=100'
OCTOBER 2023
REVISED: FEBRUARY 6, 2024

THE WORD "CERTIFY" IS UNDERSTOOD TO BE AN EXPRESSION OF THE PROFESSIONAL OPINION BY THE LAND SURVEYOR WHICH IS BASED ON HIS OR HER BEST KNOWLEDGE, INFORMATION AND BELIEF. AS SUCH IT CONSTITUTES NEITHER GUARANTEE OR WARRANTY.

NOTE: BOUNDARY LINES OF ADJOINING PROPERTIES ARE SHOWN FOR GENERAL INFORMATION PURPOSES ONLY AND ARE NOT TO BE CONSTRUED AS BEING ACCURATELY LOCATED OR DEPICTED.

THIS DRAWING IS THE PROPERTY OF THE LAND SURVEYOR. THIS PLAN AND REPRODUCTIONS, ADDITIONS OR REVISIONS OF THIS PLAN ARE NOT VALID WITHOUT THE EMBOSSED SEAL AND SIGNATURE OF THE LAND SURVEYOR WHO PREPARED THIS PLAN. JOB# 23-064.DWG FBK#324

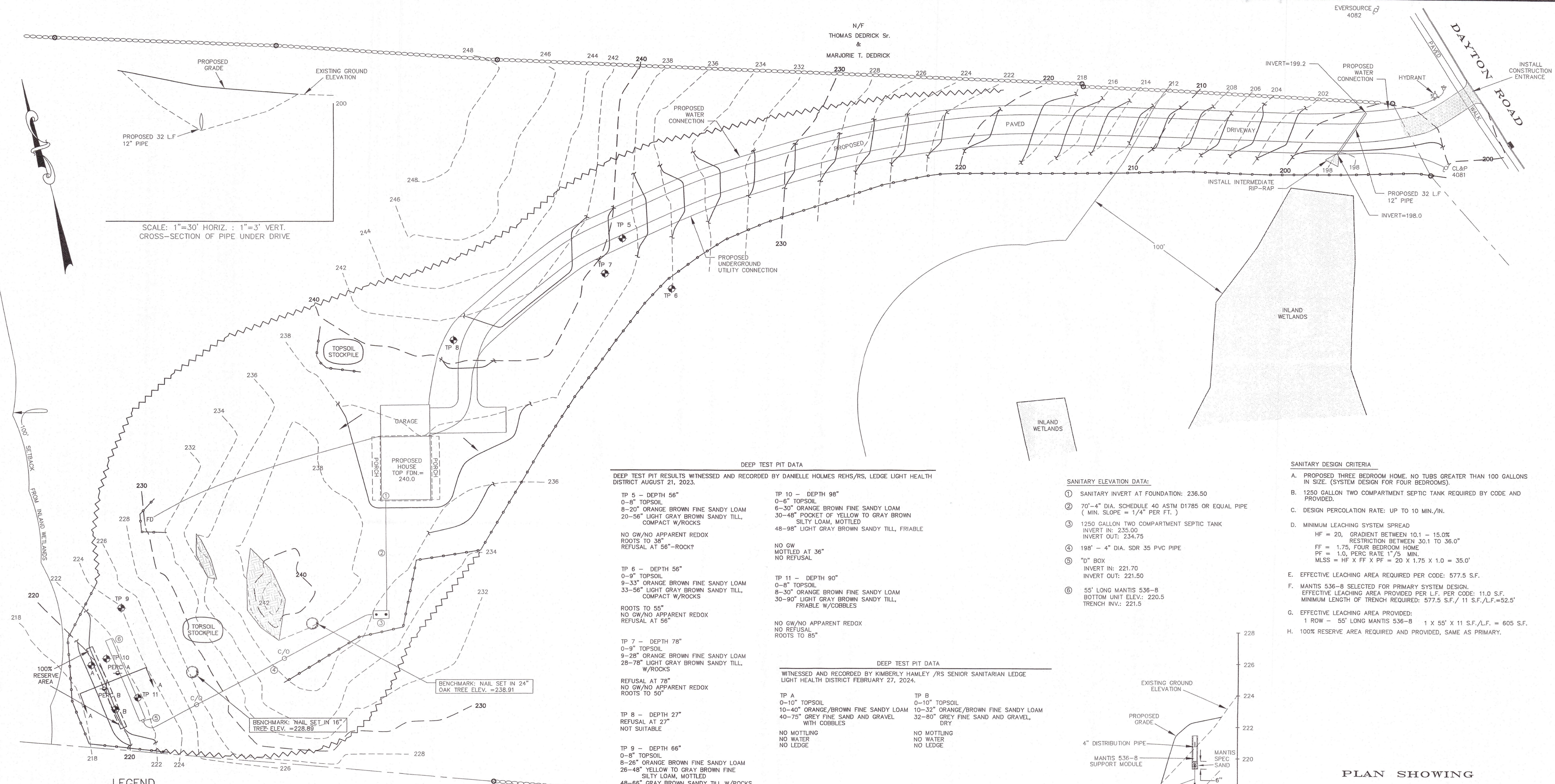
THE STONE WALLS AND/OR FENCES SHOWN AS BOUNDARIES MAY HAVE IRREGULARITIES OF COURSE BETWEEN PRINCIPAL POINTS OF COURSE INDICATED

DIETER & GARDNER
LAND SURVEYORS • PLANNERS
P.O. BOX 335
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GALES FERRY, CT. 06335
(860) 464-7455
EMAIL: DIETER.GARDNER@YAHOO.COM

RECEIVED
MAR 26 2024
Planning & Development
Town of Waterford, CT

THIS MAP AND SURVEY HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300B-1 THROUGH 20-300B-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES: "MINIMUM STANDARDS OF ACCURACY, CONTENT AND CERTIFICATION FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT", ADOPTED EFFECTIVE JUNE 21, 1996, REVISED OCTOBER 26, 2018. IT IS A BOUNDARY SURVEY BASED ON A DEPENDENT RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS A-2. TO MY KNOWLEDGE, AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

TITLE: LAND SURVEYOR CT No. 14208
DATE: OCTOBER 5, 2023



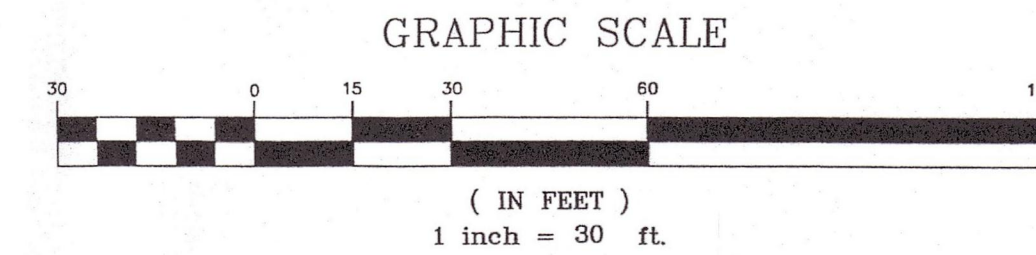
- LEGEND**
- STONEWALL
 - PROPERTY LINE
 - STREET LINE
 - EXISTING CONTOUR
 - PROPOSED CONTOUR
 - APPROXIMATE DEEP TEST PIT LOCATION
 - APPROXIMATE PERC TEST LOCATION
 - INLAND WETLANDS AS SHOWN ON PROPERTY SURVEY AND EXISTING CONDITIONS PLAN PROPERTY OF CONSTANCE A. COOK ET ALS DAYTON ROAD WATERFORD, CONNECTICUT
 - SILT FENCE/WOODCHIPS OR HAYBALES/CLEARING LIMITS
 - FOOTING DRAIN
 - PROPOSED CLEANOUT
 - WATER GATE
 - CLEARING LIMITS

NOTE: BOUNDARY LINES OF ADJOINING PROPERTIES ARE SHOWN FOR GENERAL INFORMATION PURPOSES ONLY AND ARE NOT TO BE CONSTRUED AS BEING ACCURATELY LOCATED OR DEPICTED.

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THE STONE WALLS AND/OR FENCES SHOWN AS BOUNDARIES MAY HAVE IRREGULARITIES OF COURSE BETWEEN PRINCIPAL POINTS OF COURSE INDICATED.

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1641 CONNECTICUT ROUTE 12
GALES FERRY, CT. 06335
(860) 464-7455
EMAIL: DIETER.GARDNER@YAHOO.COM

DEEP TEST PIT DATA

DEEP TEST PIT RESULTS WITNESSED AND RECORDED BY DANIELLE HOLMES REHS/RS, LEDGE LIGHT HEALTH DISTRICT AUGUST 21, 2023.

- TP 5 - DEPTH 56"
0-8" TOPSOIL
8-20" ORANGE BROWN FINE SANDY LOAM
20-56" LIGHT GRAY BROWN SANDY TILL, COMPACT W/ROCKS
NO GW/NO APPARENT REDOX
ROOTS TO 38"
REFUSAL AT 56"-ROCK?
- TP 6 - DEPTH 56"
0-9" TOPSOIL
9-33" ORANGE BROWN FINE SANDY LOAM
33-56" LIGHT GRAY BROWN SANDY TILL, COMPACT W/ROCKS
ROOTS TO 55"
NO GW/NO APPARENT REDOX
REFUSAL AT 56"
- TP 7 - DEPTH 78"
0-9" TOPSOIL
9-28" ORANGE BROWN FINE SANDY LOAM
28-78" LIGHT GRAY BROWN SANDY TILL, W/ROCKS
REFUSAL AT 78"
NO GW/NO APPARENT REDOX
ROOTS TO 50"
- TP 8 - DEPTH 27"
REFUSAL AT 27"
NOT SUITABLE
- TP 9 - DEPTH 66"
0-8" TOPSOIL
8-26" ORANGE BROWN FINE SANDY LOAM
26-48" YELLOW TO GRAY BROWN FINE SILTY LOAM, MOTTLED
48-66" GRAY BROWN SANDY TILL W/ROCKS
MAX GW 29"
ROOTS TO 48"
REFUSAL AT 66"
- TP 10 - DEPTH 98"
0-6" TOPSOIL
6-30" ORANGE BROWN FINE SANDY LOAM
30-48" POCKET OF YELLOW TO GRAY BROWN SILTY LOAM, MOTTLED
48-98" LIGHT GRAY BROWN SANDY TILL, FRIABLE
NO GW
MOTTLED AT 36"
NO REFUSAL
- TP 11 - DEPTH 90"
0-8" TOPSOIL
8-30" ORANGE BROWN FINE SANDY LOAM
30-90" LIGHT GRAY BROWN SANDY TILL, FRIABLE W/COBBLES
NO GW/NO APPARENT REDOX
NO REFUSAL
ROOTS TO 85"

DEEP TEST PIT DATA

WITNESSED AND RECORDED BY KIMBERLY HAMLEY /RS SENIOR SANITARIAN LEDGE LIGHT HEALTH DISTRICT FEBRUARY 27, 2024.

- TP A
0-10" TOPSOIL
10-40" ORANGE/BROWN FINE SANDY LOAM
40-75" GREY FINE SAND AND GRAVEL WITH COBBLES
NO MOTTLING
NO WATER
NO LEDGE
- TP B
0-10" TOPSOIL
10-32" ORANGE/BROWN FINE SANDY LOAM
32-80" GREY FINE SAND AND GRAVEL, DRY
NO MOTTLING
NO WATER
NO LEDGE

PERCOLATION TEST - A
PERFORMED BY DIETER & GARDNER, INC.
ON SEPTEMBER 15, 2023
DEPTH: 24"

TIME	READING
11:30	3 1/2"
11:35	12"
11:40	15"
11:45	18"
11:50	19 3/4"
11:55	20 3/4"
12:00	21 3/4"
12:05	22 7/8"
12:10	DRY

PERC. RATE: 1 1/5 MINS.

PERCOLATION TEST - B
PERFORMED BY DIETER & GARDNER, INC.
FEBRUARY 9, 2024
DEPTH: 30"

TIME	READING
8:55	2"
9:00	4 3/8"
9:05	6 1/2"
9:10	8 3/8"
9:15	9 7/8"
9:20	11 1/4"
9:25	12 3/4"
9:30	13 1/2"
9:35	14 5/8"
9:40	15 3/4"

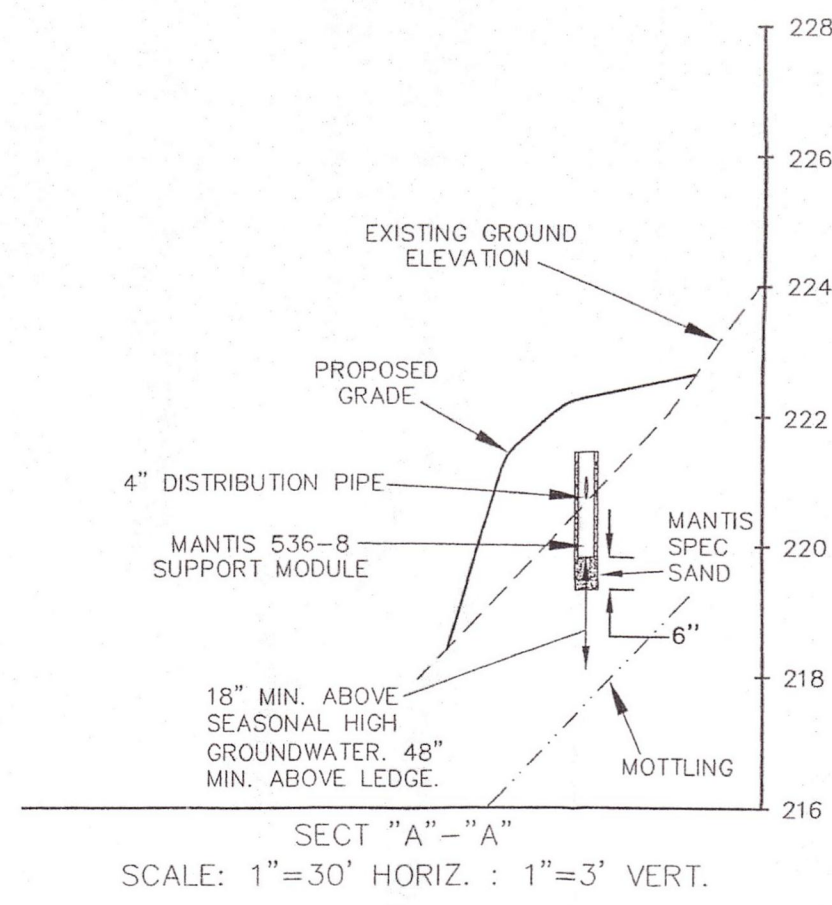
PERC. RATE: 1 1/4 MINS.

SANITARY ELEVATION DATA:

- SANITARY INVERT AT FOUNDATION: 236.50
- 70"-4" DIA. SCHEDULE 40 ASTM D1785 OR EQUAL PIPE (MIN. SLOPE = 1/4" PER FT.)
- 1250 GALLON TWO COMPARTMENT SEPTIC TANK
INVERT IN: 235.00
INVERT OUT: 234.75
- 198" - 4" DIA. SDR 35 PVC PIPE
- "D" BOX
INVERT IN: 221.70
INVERT OUT: 221.50
- 55' LONG MANTIS 536-8
BOTTOM UNIT ELEV.: 220.5
TRENCH INV.: 221.5

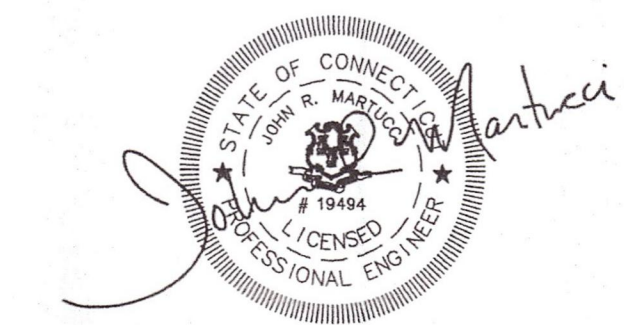
SANITARY DESIGN CRITERIA:

- PROPOSED THREE BEDROOM HOME. NO TUBS GREATER THAN 100 GALLONS IN SIZE. (SYSTEM DESIGN FOR FOUR BEDROOMS).
- 1250 GALLON TWO COMPARTMENT SEPTIC TANK REQUIRED BY CODE AND PROVIDED.
- DESIGN PERCOLATION RATE: UP TO 10 MIN./IN.
- MINIMUM LEACHING SYSTEM SPREAD
HF = 20, GRADIENT BETWEEN 10.1 - 15.0%
RESTRICTION BETWEEN 30.1 TO 36.0"
FF = 1.75, FOUR BEDROOM HOME
PF = 1.0, PERC RATE 1 1/5 MIN.
MLSS = HF X FF X PF = 20 X 1.75 X 1.0 = 35.0'
- EFFECTIVE LEACHING AREA REQUIRED PER CODE: 577.5 S.F.
- MANTIS 536-8 SELECTED FOR PRIMARY SYSTEM DESIGN.
EFFECTIVE LEACHING AREA PROVIDED PER L.F. PER CODE: 11.0 S.F.
MINIMUM LENGTH OF TRENCH REQUIRED: 577.5 S.F./ 11 S.F./L.F. = 52.5'
- EFFECTIVE LEACHING AREA PROVIDED:
1 ROW - 55' LONG MANTIS 536-8 1 X 55' X 11 S.F./L.F. = 605 S.F.
- 100% RESERVE AREA REQUIRED AND PROVIDED, SAME AS PRIMARY.



**PLAN SHOWING
PROPOSED HOUSE, DRIVE,
UTILITY CONNECTIONS
AND SEPTIC SYSTEM
PREPARED FOR
BEN TOPKIN
76 DAYTON ROAD
WATERFORD, CONNECTICUT
SCALE: 1"=30'
OCTOBER 2023**

REVISED: OCTOBER 23, 2023
REVISED: FEBRUARY 15, 2024
REVISED: MARCH 7, 2024



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TITLE: LAND SURVEYOR CT No. 14208
DATE: OCTOBER 5, 2023